

Amendments to the Drawings:

Figures 1 and 2 are replaced with formal drawings.

REMARKS

[0001] Claims 1-20 are pending. The Office Action dated 4/14/2005 (hereinafter "the Office Action" or "OA") rejected Claims 1-6, 8-16, and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Dang et al, U.S. Patent 6,718,352 ("Dang") in view of Tam, U.S. Patent 6,411,969 ("Tam"). The Office Action rejected Claims 7 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Dang in view of Tam in further view of Derek Gamradt, "Backup Without Disruption: LAN-Free, Server-Free SAN Backup Avoids Disrupting Business," issued on May 2001, <http://www.serverworldmagazine.com/monthly/2001/05/backup.shtml> ("Gamradt").

DRAWINGS

[0002] Figures 1 and 2 have been replaced with formal drawings with no substantial changes.

REJECTION OF CLAIMS 1-6, 8-16, 18-20 UNDER 35 U.S.C. §103(a)

[0003] The Examiner rejected claims 1-6, 8-16, and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Dang in view of Tam. Applicant respectfully traverses this rejection.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations."
M.P.E.P. § 2143.

The Office Action states that claim 1 of the application is rejected as obvious under 35 U.S.C. § 103(a) as being unpatentable over Dang in view of Tam. OA, p 2. Applicant respectfully submits that the Office Action has not established a *prima facie* case of obviousness because

every claim limitation of claim 1 is not taught in Dang and Tam when combined, there is no reasonable expectation of success, and there is no motivation to combine taught in Dang or Tam.

[0004] Initially, it may be useful to review the invention described in the application and the disclosures of the prior art. The application teaches a method of restoring data in a computer network system where a plurality of client systems has access to a storage pool coupled to an associated storage area network (SAN). The method requires requesting a restore, where each of the plurality of client systems may participate in said restore, and coordinating access to the data stored in the storage pool by tracking a plurality of data portions of the data to be restored and by blocking access to each of the plurality of data portions that have been restored by one of the plurality of client systems to avoid duplicative restoration efforts.

[0005] In contrast, Dang teaches a data manager on a host computer that copies the data set to a synchronous copy of the data set stored on the data storage assembly and establishes a synchronous relationship between the data set and the synchronous copy. Dang, abstract. Dang teaches that the host 24 is in communication with a storage assembly 22 via a communication connection 26 and that the data to be backed up, M1 is on the host. *Id.* at Figure 1, column 5, lines 14-19, 27-33. Dang teaches that in the conventional approach to mirroring data, when a data set is mirrored to a data storage system, the host cannot control operations on the data storage system such as split the mirrored copy since such operations must be initiated and performed by the data storage system processor. *Id.* at column 2, lines 20-26. The invention in Dang allows the host to “direct operations on a remote mirror or synchronous copy of a dataset, such as generating a duplicate copy, while retaining the original version of the data set resident on the host computer (or a data storage device closely coupled to the host computer).” *Id.* at column 2, lines 27-32.

[0006] Tam teaches making back-up copies of a source database by providing incremental and accumulate back-up copies from multiple users. Tam, Abstract. The incremental and accumulate back-up copies enable a selection of files which are identified independently from a time factor for copying selectively on to either disk or tape. *Id.*

[0007] To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974), M.P.E.P. § 2143. “All words in a claim must be considered in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03. The Office Action fails to show that Dang or Tam teaches every limitation of claim 1. The Office Action also fails to mention where element 1 of claim 1 is taught in Dang or Tam. Nothing in Dang or Tam recites explicitly or implicitly “requesting a restore wherein each of said plurality of client systems may participate in said restore.”

[0008] The Office Action states that Tam teaches a plurality of client systems that participate to restore and block access to each of a plurality of data portions that have been restored by one of said plurality systems. *Id.* at p. 3. However, Tam teaches no such system. Tam teaches “[a]n enhanced method for developing back-up copies of a source database by providing incremental and accumulate dump commands from various multiple-Users which enable a selection of certain files which are identified independently of time-factor for dumping selectively either onto a separate destination medium of disk or tape.” Tam, Abstract. Tam only deals with enhancing “the ability to perform database back-up using special features designated as the “Incremental DUMP” and also a feature designated as “Accumulated DUMP.” Tam, column 6, lines 59-62.

[0009] Tam does not deal with restore operations or restoring data where access to the data is blocked for other systems. Specifically, the sections cited in the Office Action (Tam, column 2, lines 14-42) only generally describe operations of a database management system – none of which describes restoring data while blocking access to other systems. The only reference to “blocking” cited in the Office Action comes in Tam, column 8, lines 32-33. This citation has nothing to do with blocking access. “Blocking,” as described in claim 1, is a verb, and is coupled with “access” and read in context applies to “blocking access to each of said plurality of data portions that have been restored by one of said plurality of client systems to avoid duplicative restoration efforts.” Tam, column 8, lines 32-33 uses “blocking” as an adjective modifying “factor” and is defined as the “number of logical records stored in a physical

record on disk or tape.” This definition has nothing to do with blocking access to data but has everything to do with size of a block of records on disk or tape. Dang in view of Tam therefore does not teach the second element of claim 1. Applicants therefore assert claim 1 is in condition for allowance.

[0010] In addition to not teaching every element, Dang teaches away from combining with Tam and is therefore not a proper § 103(a) reference. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the applicant.” *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966).

[0011] Comparing the purpose and structure of Dang to the present invention described in claim 1 and the specification, a host computer 24 of Dang is analogous to a client system of claim 1, the data storage system is analogous to a storage pool of claim 1, and the communication connection 26 is analogous to the storage area network (SAN) of claim 1. As the Office Action admits, Dang doesn’t teach a plurality of client systems. OA, p. 2. Dang instead teaches control of operations on a data storage system from the host. *See* Dang, Figure 1, *see generally* Dang, Summary of the Invention. Multiple hosts are not mentioned because doing so would destroy utility since Dang teaches one host controlling operations on a data storage system. *Id.* Extending Dang to cover a system with multiple hosts in communication with one data storage system destroys utility because each host would then have to independently control the data storage system with no mechanism described to coordinate control of the access of the data storage system. No such mechanism is described anywhere in Dang. Dang therefore teaches away from combining with Tam.

[0012] The Office Action does not provide a prima facie case of obviousness defeating patentability of claim 1 over Dang in view of Tam. Specifically, there is no motivation to combine Dang and Tam because Dang teaches away from a system with multiple hosts

connected to a data storage system. Such a system would destroy utility of the Dang invention because such a system would require some type of coordination between hosts at the data storage system or a single host controlling the other hosts. Such a system would create a complexity not anticipated by Dang. There is no mention in Dang of any mechanism for controlling access to a single data storage system by multiple hosts and no mention of a single host controlling other hosts. Tam also does not fill in the gaps of Dang. While Tam mentions a system with multiple clients, Tam focuses on creation of incremental and accumulated backups on tape or disk and does not deal with restoration of data and blocking access of data being restored from other clients. With respect to claim 1, Applicants assert the Dang in view of Tam is not a proper § 103(a) reference because Dang teaches away from combining with Tam and destroys utility.

[0013] No combination of Dang and Tam teaches every limitation of claim 1 as required by M.P.E.P. § 2143. Neither Dang nor Tam mentions implicitly or explicitly the first element of claim 1. In addition, since Dang deals with controlling a remote data storage system from a host (client) and Tam deals with incremental and accumulated backups, there is no expectation of success in combining the two references to get to claim 1. Neither Dang nor Tam contains any teaching or motivation to combine. "The teaching or suggestion to make the claimed combination ... must be found in the prior art, not in applicant's disclosure." MPEP 2143, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." See *MPEP 2143.01*, citing *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Because there is no motivation to combine in either Dang or Tam, the Office Action has not made out a *prima facie* case of obviousness. Applicants assert claim 1 is in condition for immediate allowance.

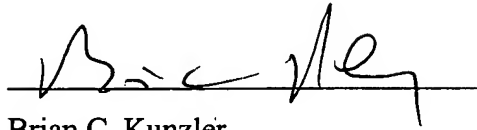
[0014] Claim 13 is an independent system claim that aligns closely with method claim 1. The Office Action cites the same references in Dang and Tam for claim 13 as for claim 1. However, claim 13 explicitly states that a storage management server coupled to the client systems is configured to coordinate access to data stored on the storage pool and to block access to data being restored to avoid duplicative restoration efforts. Claim 13 is completely different

than Dang where the host (client) controls operations on a data storage system. For this reason as well as the reasons stated above in conjunction with claim 1, applicants assert that the Office Action has not shown that Dang and Tam teach every limitation of claim 13. In addition, Dang teaches away from combining with Tam. Applicants assert that the Office Action has not made out a prima facie case of obviousness and claim 13 is in condition for allowance.

[0015] The Office Action has also not made out a prima facie case of obviousness for claim 2. The Office Action recites the Tam Abstract which only generally describes the Tam invention of incremental and accumulate backup copies, and Tam, column 2, lines 14-42, which generally describes a database management system. None of what was recited deals with “said coordinating access step” occurring “during a plurality of sessions.” The Office Action cites Tam, column 8, lines 19-21, which defines “authentication.” Again, this has nothing to do with “said coordinating access step” occurring “during a plurality of sessions.” Instead, authentication deals only with validating user logon information. The specific definition is as follows: “AUTHENTICATION: In a multi-user or network operating system, the process by which the system validates a user’s logon information.” Tam, column 8, lines 19-21. Because the cited Tam reference has nothing to do with “said coordinating access step” occurring “during a plurality of sessions” Applicants assert that the Office Action has failed to show that Dang and Tam teach every limitation of claim 2 and that claim 2 is in condition for allowance.

[0016] Claims 3-12 depend on claim 1 and claims 14-20 depend on claim 13. Because the Office Action does not make a prima facie case of obviousness in relation to claims 1 and 13, applicant respectfully asserts that claims 3-12 and 14-20 are similarly in condition for allowance because they depend from allowable claims. See, *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brian C. Kunzler", is written over a horizontal line.

Brian C. Kunzler
Reg. No. 38,527
Attorney for Applicant

Date: July 14, 2005
8 East Broadway, Suite 600
Salt Lake City, UT 84111
Telephone (801) 994-4646
Fax (801) 531-1929